

Montana University System

Board of Regents'



Updated: 2019

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MONTANA UNIVERSITY SYSTEM

Strategic Plan 2018

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MONTANA UNIVERSITY SYSTEM

Strategic Plan 2018

INTRODUCTION

The Montana University System Strategic Plan is the primary planning document of the Board of Regents. The Plan sets forth an agenda for higher education in Montana by delineating the strategic directions, goals, and objectives that guide the Montana University System (MUS).

History

In July 2006, after several years of study, public dialogue, and internal deliberations, the Board of Regents approved the Strategic Plan. Since then, updates have occurred annually, including revisions to strategic initiatives as well as a refreshing of the data within each goal.

The development of the Strategic Plan began with two primary initiatives. The first was to work more closely with the interim legislature to develop a set of mutually agreed upon accountability measures that would guide the MUS and evaluate progress. Working with the Postsecondary Education Policy and Budget (PEPB) subcommittee of the 57th Legislature, the Board of Regents did develop this set of accountability measures in July 2002. Subsequently, the PEPB subcommittee has updated the accountability measures. This latest set of agreed-upon measures evolved into “shared policy goals” and work to form one base for this strategic plan.

The second initiative was to work with the PEPB Subcommittee to explore new ways for the MUS take a more direct leadership role in the state’s economic development. This overall effort, called “Shared Leadership for a Stronger Montana Economy”, engaged a broad range of Montanans to prioritize specific initiatives that would help establish a new role for the MUS in strengthening the state’s economy. The Governor’s Office and several legislative interim committees were included in the effort. In July 2004, the Board of Regents and the PEPB subcommittee met jointly and agreed on three priority initiatives for immediate implementation:

- Develop stronger business-university system partnerships for workforce training;
- Remove barriers to access for postsecondary education; and
- Expand distance learning programs and training.

Goals

The Strategic Plan is comprised of three primary goals that contain a series of sub-goal statements and objectives within each area.

Goal 1: Access & Affordability

Increase the overall educational attainment of Montanans through increased participation, retention and completion rates in the Montana University System

Goal 2: Workforce & Economic Development

Assist in the expansion and improvement of the state’s economy through the development of high value jobs and the diversification of the economic base

Goal 3: Efficiency & Effectiveness

Improve institutional and system efficiency and effectiveness

Maintaining the high quality of our institutions and the education provided to our students is not listed as an explicit goal. This is because it is THE MOST IMPORTANT consideration for every goal and initiative of the Montana University System and is considered to be an integral part of every component of this strategic plan.



MUS Strategic Plan

Guiding Principles

The Regents' Workgroup on Reform and Reinvention recommend the following improvements to the MUS planning process.

Planning Process

The Board of Regents is committed to a biennial planning and review process that includes a broad array of University System stakeholders.

At the beginning of each biennium the MUS will hold a comprehensive planning meeting with representatives from MUS constituencies throughout the state. The goal of the meeting is to conduct a biennial review and update to the MUS Strategic Plan, including:

- review of key outcome measures and performance indicators;
- revisions and updates to strategic goals; and
- development and review of strategic initiatives

In order to provide a dynamic and effective strategic plan, the Board of Regents subscribes to the following Guiding Principles for the on-going development and review of the MUS Strategic Plan.

Systematic

The planning and review cycle for the MUS Strategic Plan will take place over the course of a biennium, whereby the Plan is assessed, reviewed, and updated at the beginning of each biennium.

Accountable

Outcomes and measurements of the strategic goals will be made public and communicated on a regular basis.

Inclusive

The planning and review process will seek to include a broad array of stakeholders from throughout the state.

Flexible

The MUS Strategic Plan is intended to be a flexible document that can adapt to the changing environment within higher education and throughout the state/nation.

Campus Connected

Campus strategic plans will be connected to the broader strategic goals in the MUS Strategic Plan.

Statewide Focus

The planning process will include a statewide focus on advancing higher education throughout the entire state.

National Context

National trends and initiatives will be considered throughout the planning process and aid in the development of strategies and initiatives.



MUS Strategic Plan

College Participation

Goal 1: Access & Affordability

System Initiatives:

- **Two-Year College**
Access: increase access and participation at two-year institutions by improving online educational opportunities, growing dual enrollment, customizing programs for nontraditional students, and promoting two-year education as a low-cost, viable entry point to high-demand occupations and/or to four-year degrees.
- **GEAR UP** (Gaining Early Awareness & Readiness for Undergraduate Programs): The purpose of this federal initiative is to increase the number of low-income students who are prepared to enter and succeed in postsecondary education. Montana GEAR UP provides college and career readiness services, such as tutoring, financial aid information, enrollment in rigorous academic courses, comprehensive mentoring, college visits, supplemental curriculum materials, and professional development for school staff. The program serves these students as they progress through middle and high school. Beginning in 2012-13 academic year, *the GEAR UP grant began funding the ACT test for all Montana high school juniors!*

Updated: 9/25/2018

Goal Statement

Prepare students for success in life through quality higher education

Objective 1.1.1

Improve postsecondary education participation rates, with particular attention to Montana residents in MUS institutions

Metric 1.1.1

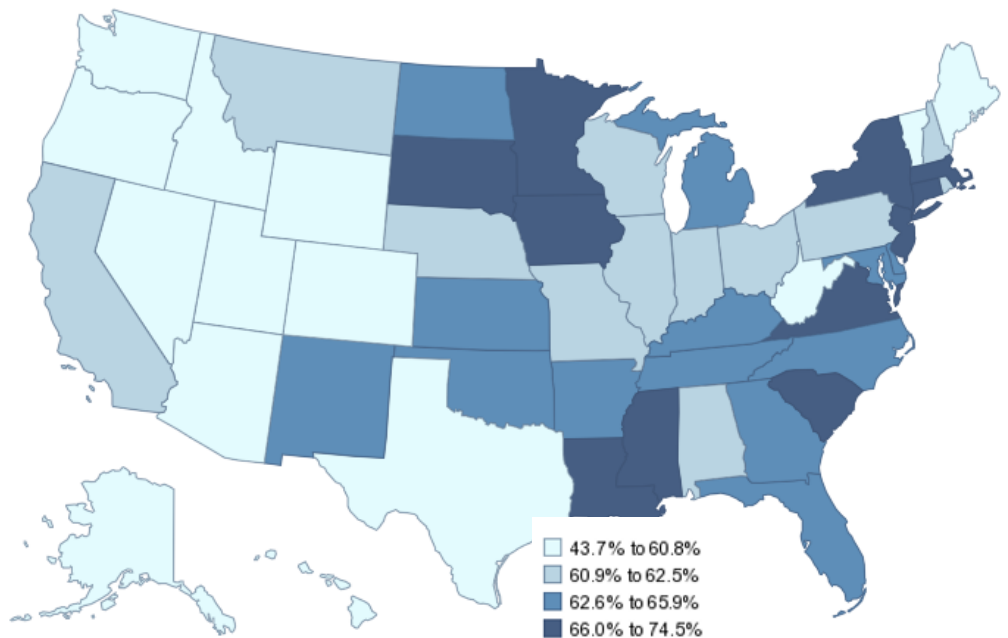
Montana College Continuation Rate

% of Montana high school graduates enrolling in college in the fall semester immediately following graduation (includes grads from both public & private high schools)

College Continuation Rate	2006	2008	2010	2012	2014	2016
# of MT High School Graduates	10,734	10,986	10,521	10,140	9,668	9,648
# of MT Grads Enrolling in College	6,176	6,280	6,371	6,023	5,882	5,392
# of MT Grads Enrolling In-state	4,604	4,838	5,104	4,719	4,621	4,209
# of MT Grads Enrolling Out-of-state	1,572	1,442	1,267	1,304	1,261	1,183
% of MT Grads Enrolling in College	57.5%	57.2%	60.6%	59.4%	60.8%	55.9%
% of MT Grads Enrolling In-state	42.9%	44.0%	48.5%	46.5%	47.8%	43.6%
% of MT Grads Enrolling Out-of-state	14.6%	13.1%	12.0%	12.9%	13.0%	12.3%

In-state Capture Rates

MUS Institutions	33.3%	33.8%	36.7%	36.3%	37.8%	36.0%
Community Colleges	3.8%	4.6%	3.7%	3.3%	3.4%	2.1%
Tribal Colleges	2.6%	2.2%	4.2%	2.5%	1.8%	1.9%
Private Colleges	3.2%	3.4%	4.0%	4.5%	4.7%	3.6%



Source: NCES, IPEDS Enrollment Survey and WICHE, Knocking at the College Door: Projections of High School Graduates, 2016

Fall 2014, Higherinfo.org

U.S. Average = 62.6%



Retention & Completion

Goal 1: Access & Affordability

System Initiatives:

- **Complete College MT:** increase the number of degree and certificate recipients by implementing Game Changing Strategies, such as: shifting to performance funding, transforming remediation efforts, implementing programs that accelerate time to degree and incentivize full-time enrollment, and providing guided pathways that help ensure student success through the development of academic maps and intrusive advising.
- **Montana TRiO Programs:** through its longstanding TRiO programs, Montana has built a strong foundation and history in providing educational opportunity and promoting student success for low-income, first-generation students, and Americans with disabilities. These programs serve nearly 10,000 students per year and are found on nearly every campus in Montana:
 - Upward Bound
 - Educational Talent Search
 - Educational Opportunity Centers
 - Upward Bound Math & Science
 - Veterans' Upward Bound
 - Student Support Services
 - Ronald E. McNair Post-Baccalaureate Achievement

Updated: June 2018

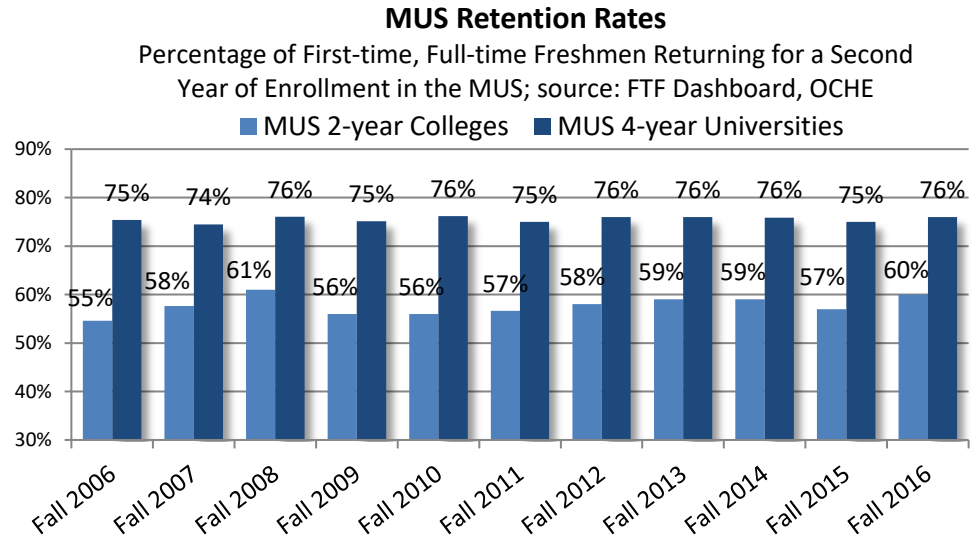
Goal Statement

Prepare students for success in life through quality higher education

Objective 1.1.2

Increase retention rates within the Montana University System

Metric 1.1.2



Objective 1.1.3

Increase graduation rates within the Montana University System

Metric 1.1.3

Graduation Rates
% of 1st-time, full-time bachelor's degree seeking students graduating in 100%, 150%, and 200% of expected program length;
(includes students that transferred and graduated from another MUS campus)

Entering Cohort	Entering Cohort #	Graduation Rates (cumulative)					
		3 year	4 year (100%)	5 year	6 year (150%)	7 year	8 year (200%)
Fall 2006	4612	0%	19%	41%	49%	52%	54%
Fall 2007	4600	1%	20%	40%	48%	52%	53%
Fall 2008	4710	1%	19%	40%	48%	52%	53%
Fall 2009	4609	1%	20%	40%	47%	50%	
Fall 2010	4933	1%	21%	41%	49%		
Fall 2011	4711	1%	23%	44%			
Fall 2012	4498	1%	23%				
Fall 2013	4618	1%					

Source: Grad Rate Dashboard, OCHE



MUS Strategic Plan

Financial Aid

Goal 1: Access & Affordability

MUS State Funded Need-based Aid Programs, FY16

- MTAP - Montana Tuition Assistance Program, Baker Grants
= \$0
- MHEG - Montana Higher Education Grant
= \$0
- State Work Study
= \$863,001
- State SEOG Match
= \$458,160
- Perkins Match
= \$0
- Governor's Post-secondary Scholarship
= \$1,600,161 total
= \$279,000 need
- Total Need-based Aid
= \$1,600,161

Loan Information

In 2015-16, 52% of 1st-time, full-time Montana residents attending a campus in the MUS took out student loans for an average amount of \$5,415; in 2002-03, 58% took out loans at an average of \$3,290 per student (does not include parent PLUS loans).

From the graduating class of 2015-16, the average loan debt for all 4-year degree recipients was \$16,687; 61% took out loans for an average of \$27,504, of those who borrowed.

Updated: June 2017

Goal Statement

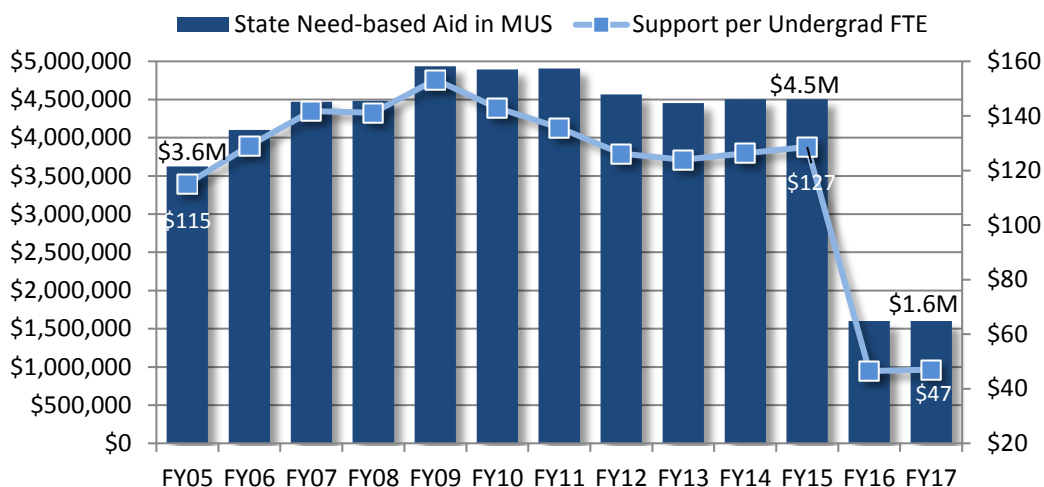
Make higher education more affordable by offering more need-based financial aid and scholarships

Objective 1.2.1

Reduce the unmet student need for financial aid (increase need-based aid)

Metric 1.2.1

State Funded Need-based Aid & Average Support per Student

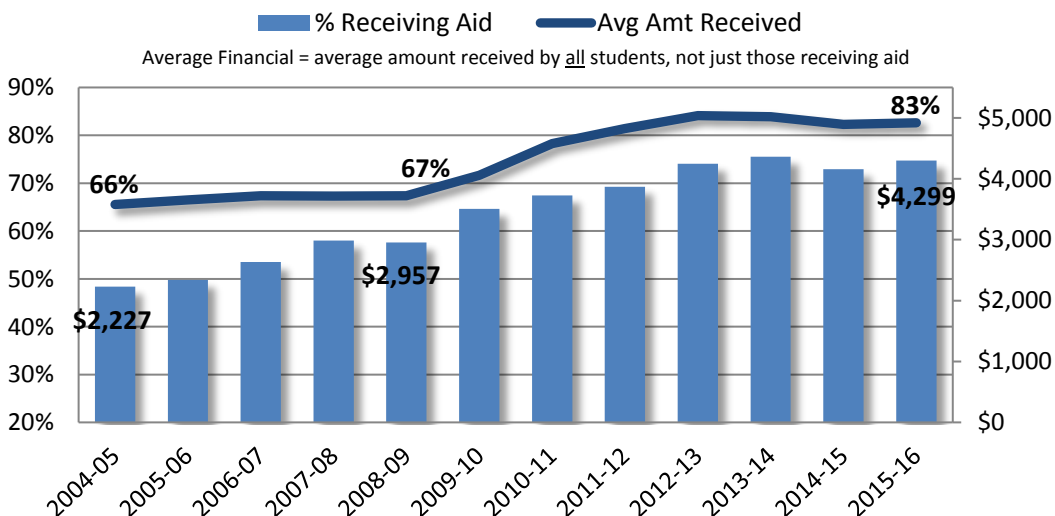


The average amount of state funded need-based aid per student in the nation (\$539 per student) is more than ten times the amount in the MUS. (source: National Assoc. of State Grant and Aid Programs)

Objective 1.2.2

Increase the percentage of students who receive grants and scholarships, as well as the average amount awarded.

MUS Student Financial Aid (all types of aid except loans) Financial Aid Received by First-time, Full-time Resident Students





MUS Strategic Plan

Affordability

Goal 1: Access & Affordability

System Initiatives:

Tuition Freeze:

- Freeze on tuition for ten consecutive years (FY08 – FY17) at all two-year colleges.
- Regional 4-year campuses (Tech, MSUN, MSUN, and UMW) tuition frozen for 8 out of 10 years since FY08.
- MSU and UM, tuition frozen during 6 of the past 10 years.

Regional Comparison

2016-17: (avg. academic year tuition and fees for full-time students)

MSU/UM = \$6,551
Regional Peers = \$8,706

MSUB, Tech, UMW,
MSUN = \$5,414
Regional Peers = \$6,873

MUS 2-yr Colleges =
\$3,352
Regional Peers = \$3,590

Financial Literacy:

Campuses in the MUS are taking a coordinated and collaborative approach toward decreasing student loan debt. Assisted by grant funds obtained by OCHE, efforts to educate and communicate to students and parents the various resources available for paying for college, as well as improving students' abilities to manage their own finances are now occurring on all MUS campus.

Updated: June 2017

Goal Statement

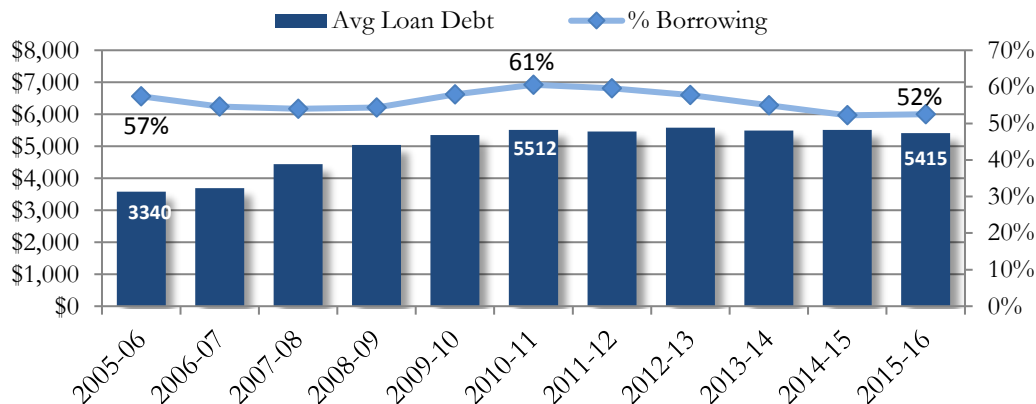
Promote postsecondary education affordability

Objective 1.3.1

Decrease average loan amounts and the percentage of students borrowing

Student Loan Debt of First-time, Full-time Resident Students in the MUS

(average loan amounts of students who borrowed; no parent PLUS loans included)

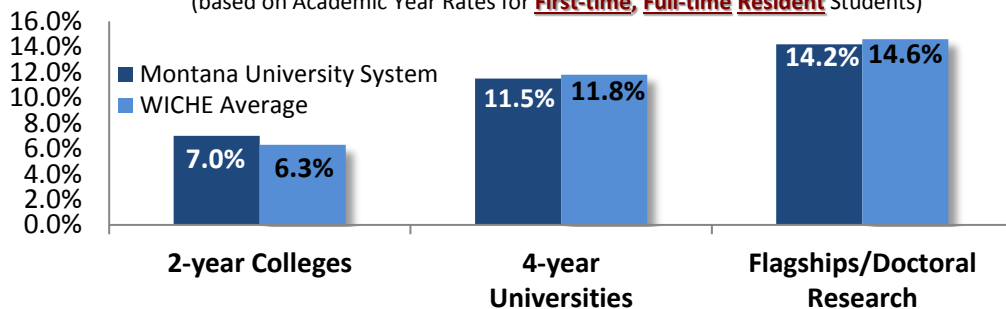


Objective 1.3.2

Decrease tuition as a percentage of median household income

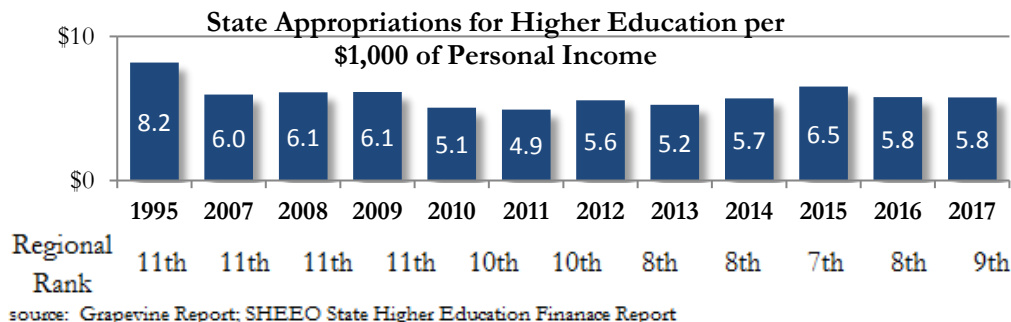
Regional Tuition & Fees Comparison

Ratio of Tuition & Fees to Median Household Income, 2017-18
(based on Academic Year Rates for **First-time, Full-time Resident** Students)



Objective 1.3.3

Increase the amount of state support as a percentage of total personal income relative to peer states and historical levels



source: Grapevine Report; SHEEO State Higher Education Finance Report



K-20 Collaboration

Goal 1: Access & Affordability

System Initiatives:

- **Dual Enrollment:** the MUS is offering credit for credit coupons to high school teachers who teach dual credit courses in order to further grow and incentivize early college opportunities statewide. Dual enrollment headcount is also a metric included in the MUS Performance Funding model for 2-year colleges.
- **Perkins/Tech Prep:** in collaboration with OPI, K-12 school districts, two-year colleges, and business and industry, strive to develop and promote sequential curriculum providing high school students with a clear, non-duplicative pathway from high school to two-year colleges and/or careers.
- **Montana Education Talent Search:** offers services to ensure that students complete high school and successfully enter college or vocational school. Talent Search is one of the federal TRIO programs (Talent Search, Upward Bound, Student Support Services) funded by the U.S. Department of Education and administered by the Commissioner of Higher Education since 1979.

Goal Statement

Work collaboratively with the K-12 education system to increase high school academic preparedness, completion, and concurrent enrollment programs

Objective 1.4.1

Increase enrollment of at-risk and disadvantaged students

Metric 1.4.1

At-risk & Disadvantaged Student Enrollment in the MUS

% of First-time, Freshmen from Low-income Families/Under-represented Minorities

At-Risk & Disadvantaged Students	Fall 2007	Fall 2008	Fall 2009	Fall 2010	Fall 2011	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
% of Freshmen, Under-represented Minorities	8.2%	9.0%	9.2%	9.4%	10.7%	12.5%	12.8%	13.2%	14.1%	15.3%
% of Freshmen from Low-Income Families*	29.4%	29.1%	35.9%	40.5%	41.8%	39.6%	37.4%	34.3%	32.9%	NA

source: MUS Data Warehouse; *students receiving Pell grants

Objective 1.4.2

Expand outreach to top academic achievers graduating from Montana high schools

Metric 1.4.2

Top Performing Students in the MUS

% of MT High School Graduates Entering the MUS with ACT/SAT Scores in the Top Quartile*

ACT/SAT Test Takers	Fall 2007	Fall 2008	Fall 2009	Fall 2010	Fall 2011	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
% of Freshmen scoring in top quartile*	31%	31%	31%	32%	32%	32%	31%	30%	29%	29%

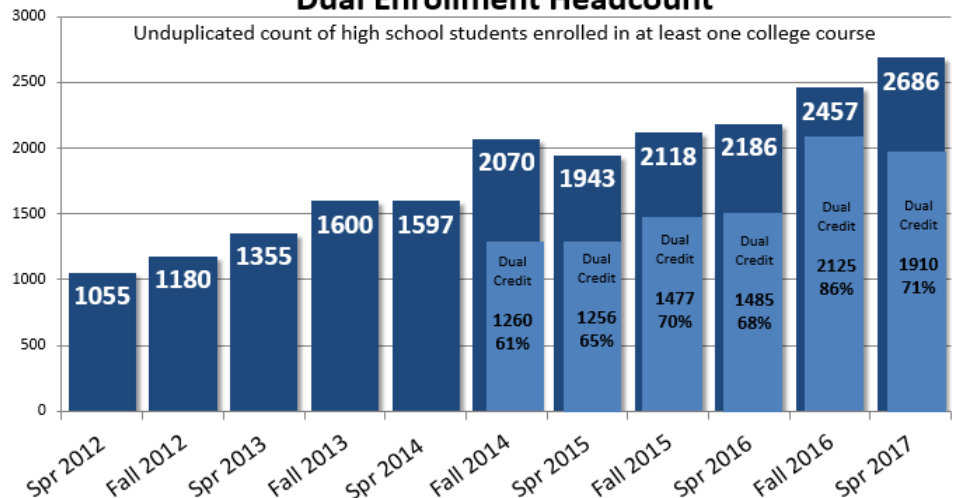
*students scoring ACT>24 or SAT>1129; percent calculated out of total number of students with test scores

Objective 1.4.3

Increase early access to higher education through dual enrollment

Metric 1.4.3

Dual Enrollment Headcount





MUS Strategic Plan

Two-Year Education

Goal 1: Access & Affordability

System Initiatives:

- **Two-Year College Access**
Promote two-year education as an affordable, viable portal to high-demand occupations and/or four-year degrees by bringing the comprehensive community college mission to all Montana two-year colleges; customizing programs for adults and broadening opportunities for high school students; focusing on effective remediation, degree completion and transfer; coordinating curriculum across the system, and creating the technology infrastructure that supports resource-sharing, improved access, and greater efficiency.

In Fall 2016, **27%** of undergraduate students in the MUS enrolled at a 2-year college.

(source: MUS Data Warehouse)

Nationally, 49% of all undergraduates attending public higher education institutions enrolled at 2-year colleges (MT ranks 42nd in the nation).

(source: IPEDS)

Updated: June 2017

Goal Statement

Increase postsecondary enrollment of traditional and non-traditional students through expanded outreach programs, evening/weekend programs, and 2-year programs

Objective 1.5.1

Increase enrollment in two-year programs

Metric 1.5.1

Student FTE, Fiscal Year Enrollment

	FY07	FY16	FY17	% CHG 16 to 17	% CHG 07 to 17
MUS 2-year Colleges					
City College at MSU Billings	699	765	748	-2.2%	7.0%
Great Falls College MSU	1,070	1,220	1,180	-3.3%	10.3%
Gallatin College MSU	142	447	519	16.1%	265.5%
Helena College UM	719	857	856	-0.1%	19.1%
Missoula College UM	1,098	1,243	1,169	-6.0%	6.5%
Highlands College of MT Tech	304	363	321	-11.6%	5.6%
MUS 2-year Total	4,032	4,895	4,793	-2.1%	18.9%
Community Colleges					
Dawson Community College	401	236	257	8.9%	-35.9%
Flathead Valley Community College	1,265	1,472	1,513	2.8%	19.6%
Miles Community College	454	382	423	10.7%	-6.8%
Community College Total	2,120	2,090	2,193	4.9%	3.4%
Two-year Education Total	6,152	6,985	6,986	0.0%	13.6%

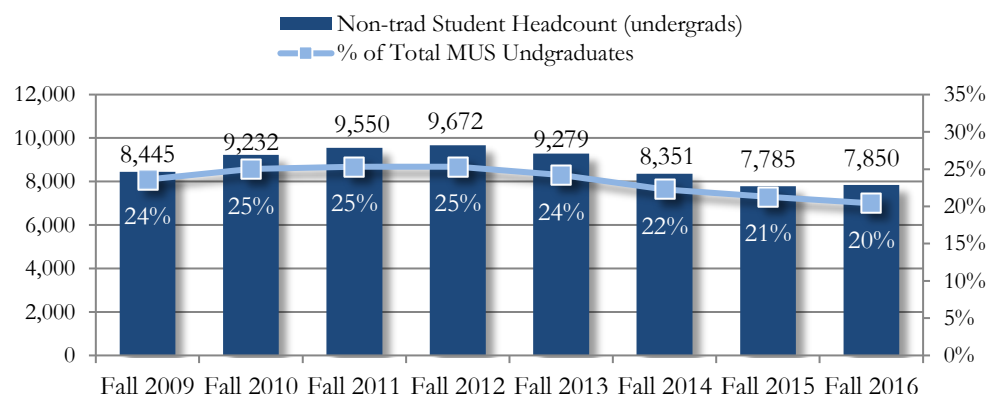
source: MUS Enrollment Reports <http://www.mus.edu/data/enrollment/enrollment.asp>

Objective 1.5.2

Increase programs and classes for non-traditional students, including evening and weekend programs

Metric 1.5.2

MUS Enrollment of Non-traditional Students (25+ yrs old)





Distance Learning

Goal 1: Access & Affordability

System Initiatives:

MUS Distance Learning Initiative:

In the 2005 and 2007 legislative sessions, the Montana Legislature appropriated funds specifically aimed at increasing the availability of distance learning in the Montana University System.

With these funds (\$300,000 in 2005, \$900,000 in 2007) the university system invested in distance learning resources, faculty, and infrastructure. As a result, Montana universities and colleges now offer more than 100 online degrees and over 700 internet courses.

MUS.edu/online is a central location for students, faculty, and the public to find information on distance education opportunities and topics in the MUS.

MUS On-line Degree & Certificate Programs:
<http://www.mus.edu/Online/default.asp>

Faculty development webinars for on-line teaching:
www.mus.edu/online/webinars.asp

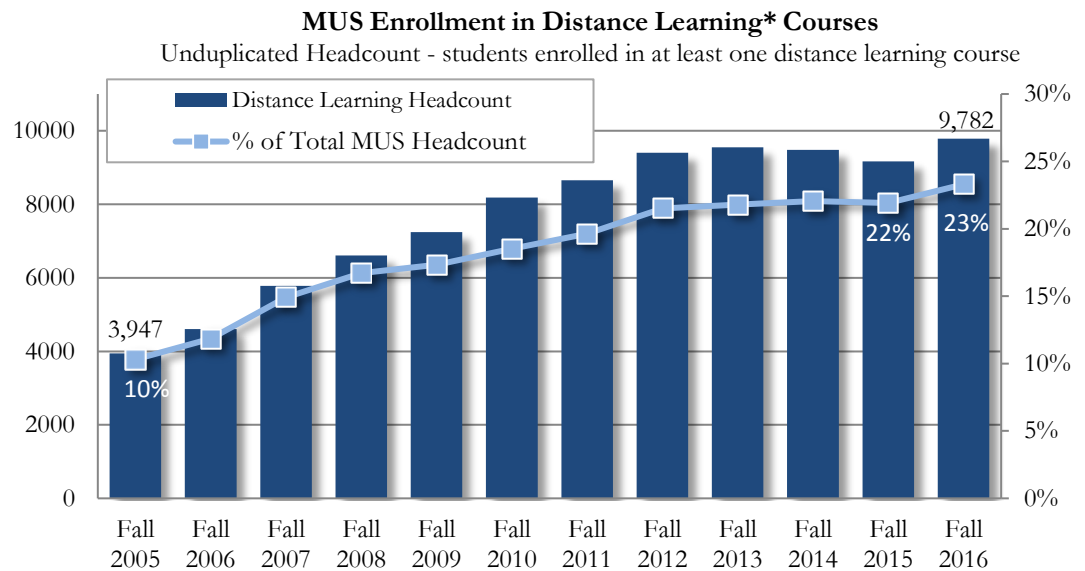
Goal Statement

Improve distance and on-line learning by coordinating online delivery of education across the entire Montana University System

Objective 1.6.1

Increase student enrollment in online courses

Metric 1.6.1



source: MUS Data Warehouse, does not include CC's

*courses where instruction is delivered entirely outside of the traditional classroom setting and there is no "in-person" contact between student and teacher (i.e. on-line and/or video courses)

Objective 1.6.2

Increase the number of online courses and degrees

Metric 1.6.2

Number of Distance Learning Courses Offered
Fall 2005 - Fall 2015, Unduplicated Number of Courses Offered

	Fall 2006	Fall 2007	Fall 2008	Fall 2009	Fall 2010	Fall 2011	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
MUS Campus											
2-year	143	156	165	177	183	200	220	210	222	212	217
4-year	254	315	328	359	401	434	495	515	533	536	575
MUS Total	397	471	493	536	584	634	715	725	755	748	792
Annual % Chg	16%	19%	5%	9%	9%	9%	13%	1%	4%	-1%	6%

source: MUS Data Warehouse, does not include CC's



Workforce Development

Goal 2: Workforce & Economic Development

System Initiatives:

- **SWAMMEI Grant:** \$25 million grant to boost job training programs at the 13 two-year colleges across Montana. The goal is to train more than 9,000 Montanans to fill good-paying jobs in the rapidly growing advanced manufacturing and energy industries.
- **HealthCARE Montana**
A \$15 million grant supporting a partnership between the Montana Department of Labor and Industry and 15 of Montana's two-year colleges. The partnership builds a pathway to training programs that will meet the current and future needs of organizations in healthcare. Montana is projected to have massive workforce shortages in health fields and this project will help address the projected gap in occupations such as nursing, dental assistant, EMT, health information technology, and medical transcription by aligning innovative curriculum with industry standards.

Goal Statement

Increase responsiveness to workforce development needs by expanding and developing programs in high demand fields in the state

Objective 2.1.1

Increase degrees and certificates awarded in high-demand occupational fields

Metric 2.1.1

MUS Healthcare Degrees & Certificates Awarded

Degrees & Certs.	2005-06	2011-12	2012-13	2013-14	2014-15	2015-16	2006 to 2016	
							# chg	% chg
Certs. of Applied Sci	87	62	68	69	88	57	-30	-34%
Associate Degrees	366	510	515	558	490	462	96	26%
Bachelor's Degrees	263	267	317	336	356	356	93	35%
Master's Degrees	45	95	158	161	145	166	121	269%
Professional Degrees	90	189	213	230	245	226	136	151%
Doctoral Degrees	1	0	0	0	1	9	8	800%
Total	852	1,123	1,271	1,354	1,325	1,276	424	50%

source: MUS Data Warehouse, does not include CC's

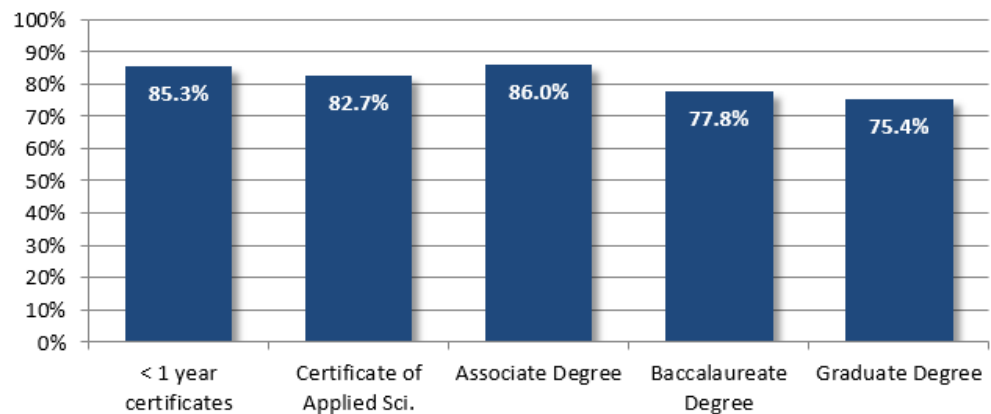
Objective 2.1.2

Increase job placement rates

Metric 2.1.2

Percentage of Resident Graduates Entering Montana's Workforce

2014-15 Graduates Employed Within One Year of Graduation



- In 2015, 80% of resident students graduating from the MUS found employment in Montana within one year of graduation, up from 74% in 2009.



Workforce Development

(Continued)

Goal 2:

Workforce & Economic Development

System Initiatives:

- **Big Sky Pathways:** In collaboration with OPI, K-12 school districts, two-year colleges, and business and industry, develop and promote sequential curriculum providing high school students with a clear, non-duplicative pathway from high school to two-year colleges and/or careers.
- **Perkins:** Promote preparation for and entry into high-wage, high-demand careers, with particular emphasis on under-represented demographics, by building strong career/technical education programs in K-12 school districts, two-year colleges, and community-based organizations.

Updated July 2017

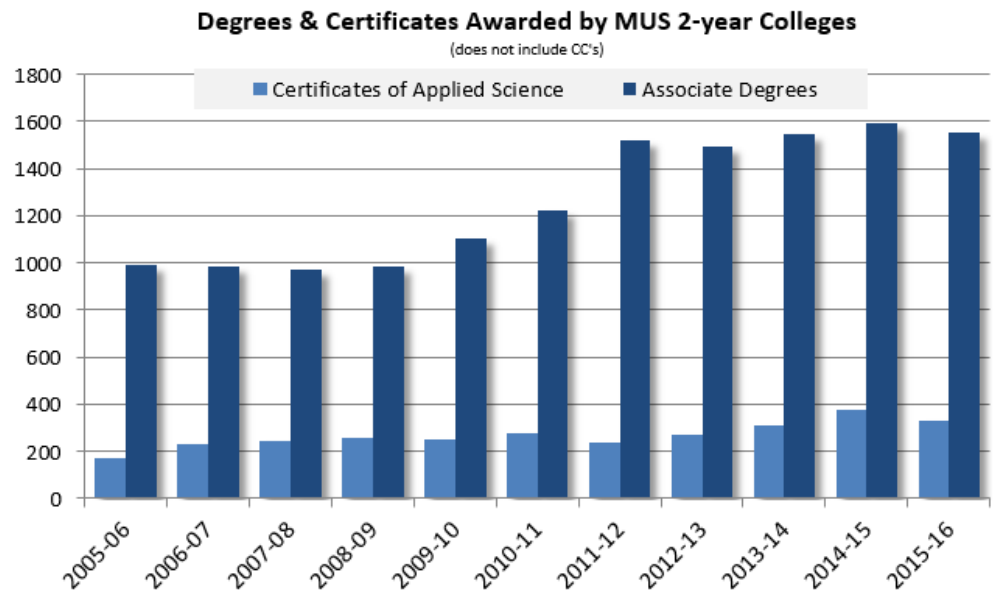
Goal Statement

Increase responsiveness to workforce development needs by expanding and developing programs in high demand fields in the state

Objective 2.1.3

Increase the number of certificates and degrees conferred in 2-year programs

Metric 2.1.3



source: MUS Data Warehouse



Research & Development

Goal 2: Workforce & Economic Development

System Initiatives:

MUS Research Initiative:
The MUS received an appropriation of \$15M in state funds from the 2015 Montana Legislature to serve as seed money to leverage university-based research into strategic advancements for Montana's economy. The fundamental purpose of this research initiative is to: (1) solve Montana problems with Montana solutions; (2) create good Montana private-sector jobs, and/or; (3) grow emerging and important research sectors that contribute to the diversity of Montana's economy.

The Commissioner of Higher Education administered competitive grants to researchers on the basis of each project's potential for private-sector job creation, commercialization, and economic return on investment for the State of Montana. Areas of emphasis include agriculture, natural resources and energy, materials and manufacturing, health and biomedical sciences, and technology and computer science.

For more details and complete list of funded projects, go to:
http://www.mus.edu/research_initiative.asp

Updated: Dec. 2017

Goal Statement

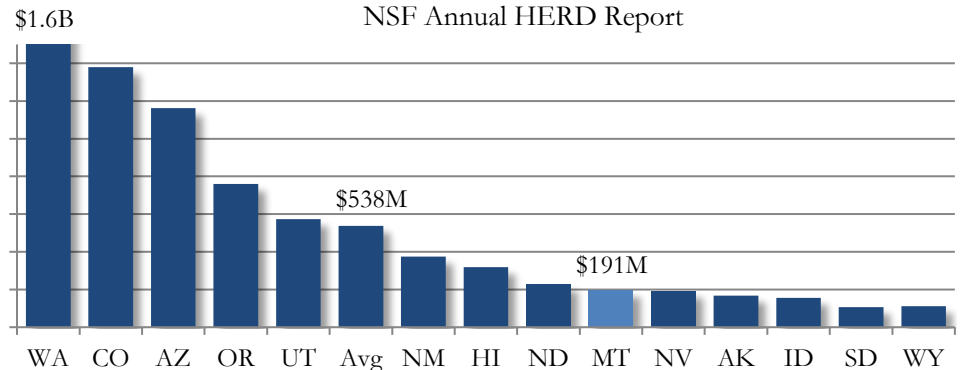
Establish collaborative programs among institutions, the private sector, and the state to expand research, technology transfer, the commercialization of new technologies, and the development of our entrepreneurs

Objective 2.2.1

Increase research & development receipts and expenditures

Metric 2.2.1

Research & Development Expenditures by State, 2016 NSF Annual HERD Report



source: National Science Foundation (NSF)

note: figures may differ slightly from the MUS annual data collection due to reporting criteria

MUS Research & Development Expenditures by Institution

Campus	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
MSU Bozeman	\$110,929,895	\$109,612,283	\$106,878,735	\$118,388,115	\$130,788,759
MSU Billings	\$2,924,336	\$2,815,426	\$3,345,519	\$3,291,941	\$3,299,073
MSU Northern	\$3,140,745	\$1,710,788	\$2,696,257	\$2,712,962	\$2,127,012
UM Missoula	\$59,306,533	\$58,272,583	\$64,572,795	\$78,536,903	\$88,152,772
MT Tech	\$7,273,560	\$6,926,744	\$7,569,062	\$7,727,561	\$8,643,766
UM Western	\$648,325	\$679,964	\$694,977	\$653,516	\$934,471
MUS Total	\$184,223,394	\$180,017,788	\$185,757,345	\$211,310,998	\$233,945,853

source: MUS Annual Research Report; note: expenditures include all sponsored activities (research, instruction, and other sponsored activities) managed by the respective research/business administrative offices as restricted funds via grants, contracts, or cooperative agreements, per BOR Policy 401 & 404

Objective 2.2.1

Increase technology licenses with Montana businesses

Metric 2.2.1

MUS Technology Transfer Activity

MUS Tech Transfer Stats	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
Patents Issued	8	9	8	7	8	9
Active Licenses (Total)	238	238	287	302	281	316
Active Licenses (in MT)	97	82	87	89	83	94
% Licenses w/ MT Companies	41%	34%	30%	29%	30%	30%
License/Patent Revenues	\$663,586	\$454,479	\$315,560	\$437,782	\$568,324	\$401,140
Reimbursed Patent Costs	\$258,379	\$131,007	\$250,155	\$151,260	\$599,996	\$394,622

source: MUS Annual Research Report



Graduate Education

Goal 2:

Workforce & Economic Development

System Initiatives:

Faculty, staff, and students in the Montana University System (MUS) are engaged in science and technology research and graduate education that help build Montana's economic future. The MUS research enterprise also builds partnerships with communities, businesses, and other educational entities to help align science education and research with pressing social and economic challenges.

Expanding graduate education capacity and opportunities will help grow the MUS research enterprise. The following initiatives are key to this effort:

- Improved stipends and resident tuition status to attract competitive graduate students;
- Sufficient start-up funding packages and salaries to retain and recruit competitive faculty;
- Strategic addition of graduate programs to meet workforce needs and research opportunities ; and
- Innovative partnerships and financing to build modern facilities and a competitive research infrastructure.

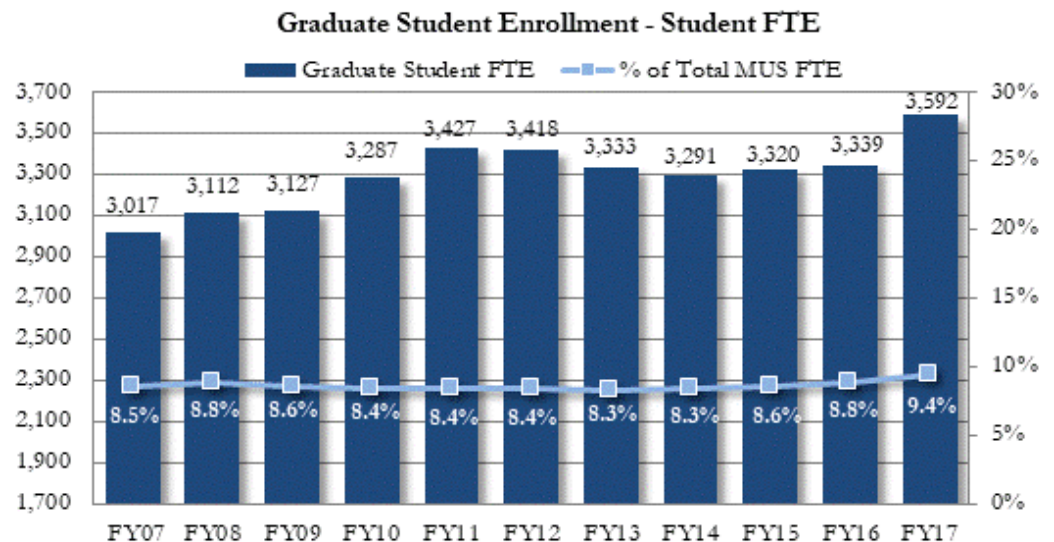
Goal Statement

Expand graduate education capacity and opportunities in order to increase educational attainment of Montanans, fuel economic development, grow the research and development enterprise, and contribute to the cultural and social fabric of Montana and the region.

Objective 2.3.1

Increase the number and percentage of graduate students in the Montana University System.

Metric 2.3.1



Source: MUS Data Warehouse; note: graduate FTE includes students enrolled in master's, doctorate and professional programs

Objective 2.3.2

Increase graduate degree production, maintaining a strong concentration in science, technology, engineering, and math (STEM) fields.

Metric 2.3.2

MUS Graduate Degrees Awarded

MUS Graduate Degrees ⁽¹⁾	2001-02	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Graduate Degrees Awarded	1113	1523	1601	1611	1509	1682	1552
Graduate Degrees Awarded per 100 Graduate Student FTE	39.5	44.4	46.8	48.3	45.8	50.7	46.5
% STEM Degrees (Narrow)	18%	14%	13%	12%	12%	14%	16%
% STEM Degrees (Broad)	34%	43%	39%	48%	48%	44%	47%

¹⁾ includes master's, doctoral, and professional degrees

²⁾ source: MUS Data Warehouse

STEM (narrow): based on NCES definition using 2 digit CIPs: (14) Engineering and (15) Engineering Tech (11) Comp & Info Sci (26) Biological and Biomedical Sci, (27) Mathematics & Stats, (40) Phy Sci, (41) Sci Tech

STEM (broad): (03) Nat Res & Conservation, (14) Engineering and (15) Engineering Tech (11) Comp & Info Sci (26) Biological and Biomedical Sci (01) Ag Operations (27) Mathematics & Stats, (40) Phy Sci, (41) Sci Tech (51) Health Prof; Also the following 6 digit CIPs were included, Ed Sci 13.1316, Tech Comm 23.1303, Interdisciplinary Studies (MT Tech) 30.9333



MUS Strategic Plan

Information Technology

Goal 3: Efficiency & Effectiveness

System Initiatives:

- **K-20 Data Linkage:** develop linkages between K-12, postsecondary, and labor information in order to produce a method for annually tracking student cohorts from high school to college to the workforce.
- **Research & Education Network:** operate and maintain a state-of-the-art network that provides high speed connections between campuses, as well as connections to national research and education networks.
- **CC Banner Integration:** integrate Dawson Community College and Miles Community College into University of Montana hosted instance of Banner

Goal Statement

Improve the accuracy, consistency and accessibility of system data, including the continued development of a comprehensive data warehouse

IT Strategic Directions

In order to meet the three primary goals outlined in the Board of Regents' Strategic Plan, the Montana University System will strive to implement the following Information Technology Strategic Directions:

1. Enterprise Information Systems

Develop an integrated information system with the goal of maximizing administrative efficiencies, allowing for seamless student enrollment between campuses, and promoting consistent business practices across all institutions.

Assumptions:

- The MUS will continue to make incremental steps toward developing a single integrated information system.
- Incremental steps include, but are not limited to, the following:
 - Utilizing a single instance of the administrative information software that is hosted and managed by the main campus on each side of the system (i.e. UM and MSU host a single instance of Banner for their affiliated campuses, with the potential for including the community colleges, as well as tribal colleges).
 - Allowing for multi-institutional functionality to enable (for example): enrollments from more than one campus on students' schedules and transcripts, financial aid based on combined enrollment at more than one institution, centralized administrative services, such as, a single source for payroll generation.
 - Standardizing codes and data elements, as well as aligning business rules and practices.

2. Network Connectivity

Continue to develop and improve an education network that provides high speed telecommunication capabilities that link MUS institutions, provide connectivity to national research and education networks, and expand the reach of the MUS to remote areas of Montana.

3. Data Warehousing

Maintain and work to improve a system-wide data warehouse for the purpose of measuring the goals in Board of Regents' Strategic Plan, collecting and reporting official enrollment, developing linkages with K-12 and workforce data, and producing and monitoring the MUS Operating Budget.



MUS Strategic Plan

Efficiency

Goal 3: Efficiency & Effectiveness

System Initiatives:

- **Shared Services Initiative:** a collaborative effort between MUS campuses and the system office to pursue and achieve system-wide efficiencies:
 - Strive to improve administrative and support activities to provide better service to students and faculty on every campus
 - Enable resources to be leveraged across the entire organization
 - Reduce duplication and maximize resources

- **Expenditures by Program:** expenditures for Instruction, plus Academic Support, plus Student Services should account for at least 70% of total expenditures.

- **Cost Control:** controlling educational cost growth is a central tenet of an efficient and affordable educational system. The MUS strives to limit the growth in educational costs to the growth in CPI.

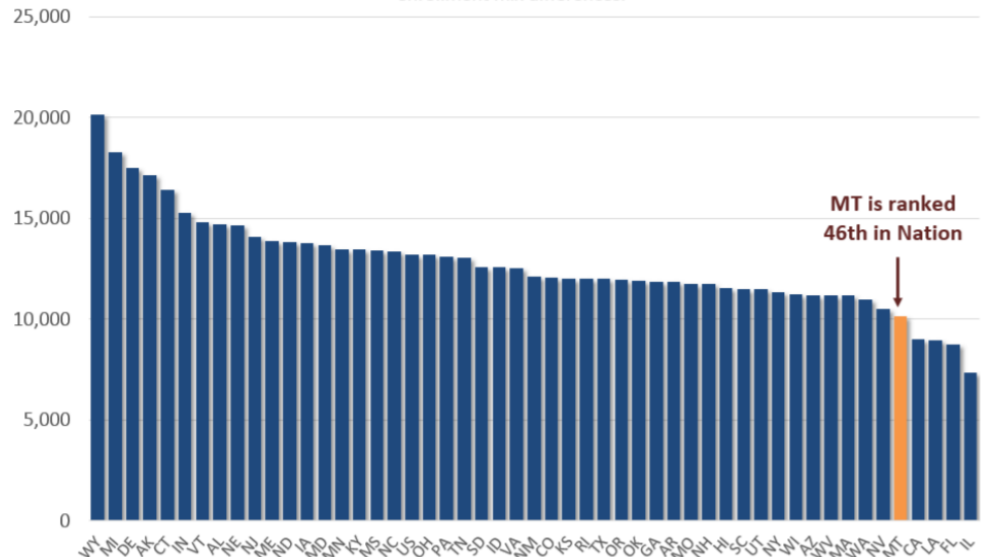
Goal Statement

Deliver efficient and coordinated services

Metric 3.2.1

Total Educational Revenue per Student FTE, FY16

Total educational revenue is the sum of public higher education state appropriations and public in-state and out-of-state net tuition. Figures are adjusted for cost of living and enrollment mix differences.



source: SHEEO, State Higher Education Finance Report <http://www.sheeo.org>

Metric 3.2.2

Expenditures by Program

Current Unrestricted Expenditures, Ed Units Only

Source: BUD 220 (includes MREDI)

Expenditure Program Areas	1985	1995	2005	2010	2015	2016	Budgeted 2017	Budgeted w/o MREDI 2017
Instruction	53%	54%	52%	49%	48.8%	48.9%	49.5%	50.5%
Research	1%	1%	1%	1%	1.1%	1.8%	2.6%	0.7%
Public Service	0%	1%	1%	1%	0.9%	0.9%	0.8%	0.9%
Academic Support	11%	11%	12%	12%	11.9%	11.7%	11.2%	11.4%
Student Services	9%	9%	7%	8%	8.7%	8.5%	8.2%	8.4%
Institutional Support	10%	9%	9%	10%	8.6%	8.3%	7.9%	8.0%
Operation and Maintenance	13%	12%	12%	12%	10.9%	11.2%	11.3%	11.5%
Waivers & Scholarships	2%	4%	7%	8%	9.1%	8.8%	8.5%	8.7%

Goal: at least 50% **Instruction** AND 70% **Instruction + Academic Support + Student Services**

FY 16 Actual: Instruction = 48.9%; Inst + AcSup+ StudServ= 69.1%

FY 17 Budget: Instruction = 50.5%; Inst + AcSup+ StudServ= 70.3%



MUS Strategic Plan

Transferability

Goal 3: Efficiency & Effectiveness

System Initiatives:

MUS Transferability Initiative:

The 2007 Legislature appropriated \$1.5 million to help the MUS improve the transferability of courses and further develop its centralized data system.

As a result, the MUS initiated a *“common course numbering”* process for all undergraduate courses. This process requires that all courses deemed to be equivalent must possess the same course prefix, number, and title; all courses with same name and number will directly transfer on a one-to-one basis with equivalent courses at the receiving institution.

Progress:

As of June 2012, more than 10,000 courses in over 60 disciplines have gone through the Common Course Numbering process. This represents 100% of the undergraduate courses in the MUS.

Updated: June 2017

Goal Statement

Deliver efficient and coordinated services.

Objective 3.3.1

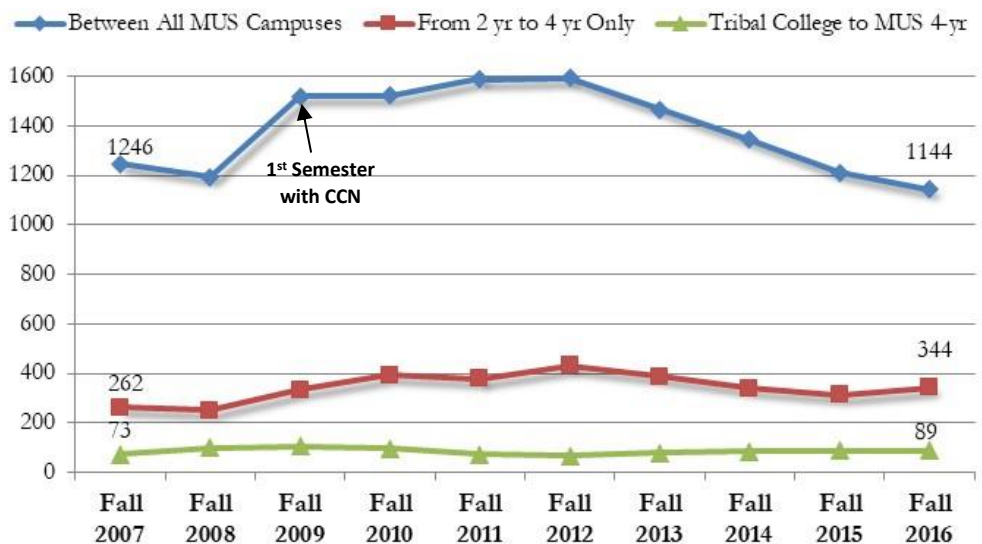
Improve articulation and transferability among all 2-year and 4-year institutions, including community colleges and tribal colleges

Metric 3.3.1

MUS Transferability Initiative – Common Course Numbering

- All undergraduate courses in the Montana University System will go through the process of common course numbering (CCN)
 - By the end of Spring 2012, all undergraduates courses in the MUS will have gone through the CCN process (10,000 courses in more than 60 disciplines).
- All courses deemed to be significantly similar must possess the same prefix, course number, title and credits; and directly transfer on a one-to-one basis
 - See BOR Policy 301.5.5 – [Equivalent Course Identification and Numbering](#)
- Common course numbering will result in a transparent computerized program that demonstrates transferable courses across the university system
 - Link to [Common Course Numbering Transfer Guide](#)

New Transfer Student Enrollment Between MUS Institutions



source: MUS Data Warehouse



Budget Allocation

Goal 3: Efficiency & Effectiveness

Performance Funding History:

In May 2013, the Montana University System (MUS) adopted a performance funding model to augment the university system's allocation methodology for distributing state appropriations to campuses. This first version of the MUS performance funding model allocated \$7.5 million of state dollars in fiscal year 2015, approximately 5% of total state appropriations. The model utilized two basic metrics for all campuses, freshmen to sophomore retention of first-time, full-time students and the annual number of undergraduate degrees and certificates awarded.

Following the approval of the initial performance funding model, a Performance Funding Taskforce comprised of MUS administrators and faculty leaders, designed a more detailed model. The Montana Board of Regents approved the model in May 2014 for allocation of funds in fiscal years 2016, 2017 and beyond. This current version of the performance funding model allocated \$30 million of state appropriations (\$15 million in both fiscal years 2018 and 2019), approximately 8% of the total state appropriation to the MUS educational units.

Goal Statement

Biennial review/update of the budget allocation model consistent with state and system policy goals and objectives

Background

The Montana Legislature allocates the vast majority of funding for our education units in a "lump sum" that is then allocated by the Regents to the individual institutions within the system. How these funds are allocated is central to every strategic objective of the Board. In order to achieve the goals and objectives in this strategic plan, the basic funding allocation model must be continually analyzed. To be an effective tool for achieving our strategic goals, the allocation model should, at a minimum:

- Focus on financing for the state system, not only funding for the individual campuses;
- Be transparent as to the policy choices of the Regents, Legislature, and executive branch;
- Provide a framework for dealing with allocations to institutions, tuition revenues, financial aid, and mandatory fee waivers;
- Have a specific fund dedicated to furthering Regents' priorities;
- Protect institutional viability by moderating the short-term effects of enrollment changes;
- Provide incentives for institutions to collaborate as a system;
- Ensure equity of funding among all institutions;
- Maintain an adequate base of funding and education quality for all institutions;
- Maintain a differential between 2-year and 4-year tuition.

Performance Funding

In May 2014, the Board the Regents approved a new set of performance metrics designed to be used in 2015-16 and 2016-17 fiscal years, and beyond. Within this set of metrics, retention rates and completion numbers are measured for all MUS campuses. In addition, mission specific metrics are identified at the flagship and 2-year campuses. Degree counts in graduate programs and research expenditures are included in the flagship campus measurements, while early college enrollment of high school students coupled with a menu consisting of transfer rates, success in developmental education, credit accumulation, and licensure/exam pass rates round out the metrics for 2-year campuses. For all campuses, special weighting will be applied for Pell-eligible students (low income), American Indian students, nontraditional-age students, and veterans.

The Regents approved the amount of funding to be distributed in this new model.
[FY18 Allocations](#) | [FY17 Allocations](#) | [FY16 Allocations](#)



MUS Strategic Plan

Success Agenda

(Appendix A)

Regents' Workgroup on Reform and Reinvention

In August of 2009 the Board of Regents designated a subcommittee of regents, along with six citizen advisors to serve as a workgroup to address topics related to reinventing and reforming the Montana University System.

Working throughout 2009 and 2010, the Workgroup focused its attention on providing guidance and recommendations related to the MUS 2-year Education Initiative (College!Now), mission differentiation, performance-based funding, system integration, and the MUS planning process.

Recommendations

Upon completion of their work, the Regents' Workgroup recommends that the Board of Regents adopt a "Success Agenda" in order to increase educational attainment of Montanans and provide an efficient and effective system of higher education.

Additionally, the Regents' Workgroup recommends that the Board of Regents include a set of *Guiding Principles for Strategic Planning* in the MUS Strategic Plan.

In order to increase the overall educational attainment of Montanans and provide an efficient and effective system of higher education, the Board of Regents adopted a *Success Agenda* to augment the Strategic Plan and help guide the Montana University System.

1. Institutional Role Differentiation

- Define distinct roles for the primary components of the MUS (Doctoral Research Universities, Baccalaureate/Masters Universities, Comprehensive 2-year Colleges)
- Utilize role guidelines to serve as templates to develop policies and criteria that:
 - Sustain quality academic programs
 - Increase access AND student success
 - Guide development of new programs and research
 - Provide for efficient delivery of programs, services and overall administration
 - Emphasize collaboration with K-12
 - Target resource allocation

2. Admission Standards

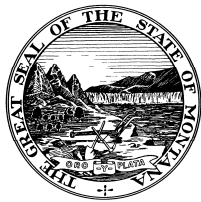
- Utilize multiple criteria in admissions policies to help align students with the university/college that matches their academic preparation, goals, and abilities
- Strengthen enrollment management strategies, such as requiring more rigorous documentation of college readiness at doctoral/research universities, in order to improve student success
- Reaffirm the open admissions concept of comprehensive 2-year colleges within Board policy to improve access and clarify differences between 2-year and 4-year (College!Now)

3. Transferability

- Ensure seamless transferability between institutions through a system of common course numbering and aligned student learning outcomes
- Develop a Board approved transfer credential (e.g. Regents Transfer Program) to improve 2-year to 4-year transfer rates and success (College!Now)

4. Community College Programs (College!Now)

- Increase utilization, enrollment and degree production in community college programs by targeting:
 - Academically under-prepared
 - Pre-college students (dual enrollment)
 - Non-traditional students (25+ yrs.)
- Clarify and promote the community college mission in Montana and role within the MUS by:
 - Rebranding the Colleges of Technology
 - Defining regional hubs with differential tuition policy, program delivery, etc.



MUS Strategic Plan

Success Agenda (cont.)

(Appendix A)

Regents' Workgroup Members

Regents

Todd Buchanan (Chair)
Janine Pease
Lynn Hamilton

Citizen Advisors

Bob Hawks
Elsie Arntzen
Rick Hays
Clayton Schenck
Mike Halligan
Quint Nyman

5. Need-based Financial Aid

- Work to develop strategies to reduce unmet student need
- Increase the amount of need-based student aid

6. Program and Service Alignment

- Align program development, expansion, and contraction with consistently assessed workforce demands
- Focus programming to eliminate unnecessary/undesired duplication of programs by:
 - identifying institutional niches
 - utilizing distance learning, especially for collaborative approaches
 - aligning business practices and integrating technology to improve system-wide collaboration and increase student access
- Increase investment in research and graduate programming to amplify institutional expertise and improve Montana's economy

7. Performance-Based Funding

- Align targeted outcomes with institutional type through purposeful allocation of resources based on programming type
- Associate achievement in key performance areas with aspects of funding (allocation model)
- Define, measure, and reward success by institution

8. Data and Information

- Integrate data throughout the MUS in order to:
 - Improve student access and services
 - Increase administrative efficiencies
 - Improve academic coordination
 - Produce quality data

9. Communication & Advocacy

- Effectively communicate the University System's "product" to stakeholders
- Develop a focused marketing and public relations strategy to increase support for higher education

10. Faculty and Staff Support

- Provide compensation and professional development adequate for recruiting and retaining the faculty and staff necessary to achieve success
- Provide faculty and staff a meaningful role in institutional and system decision making